

FUTURE FISHERIES IMPROVEMENT PROGRAM**GRANT APPLICATION***(please fill in the highlighted areas)***I. APPLICANT INFORMATION**A. Applicant Name: Clark Fork CoalitionB. Mailing Address: Box 7593C. City: Missoula State: MT Zip: 59801Telephone: 406-542-0539 x204D. Contact Person: Will McDowellAddress if different from Applicant: n/aCity: State: Zip: Telephone: 406-396-7716 cellE. Landowner and/or Lessee Name
(if other than Applicant): U.S. Forest Service, Beaverhead Deer Lodge NFMailing Address: Pintler Ranger District 88 Business LoopCity: Philipsburg State: MT Zip: 59858Telephone: 406-859-3211**II. PROJECT INFORMATION***A. Project Name: East Deer Lodge Stock Water and Trout Habitat ProjectRiver, stream, or lake: Perkins Gulch, NF Dry Cottonwood, Orofino, and SF CottonwoodLocation: Township (see map) Range Section County: Deer Lodge and Powell

B. Purpose of Project:

This project will enhance westslope cutthroat trout spawning and rearing habitat along about three miles of streams in the Pintler Ranger District by reducing livestock impact on the streams.C. Brief Project Description:

The East Deer Lodge Valley project area of the Beaverhead Deer Lodge National Forest includes several streams with westslope cutthroat trout populations which suffer from degraded habitat. The South Fork of Cottonwood, Orofino Gulch, the North Fork of Dry Cottonwood, and Perkins Gulch are small streams which all harbor westslope cutthroat trout, and no other trout species. The main constraint on these trout populations is excessive riparian and aquatic habitat damage from summer livestock grazing on two USFS allotments. The Beaverhead Deer Lodge National Forest (USFS) and Clark Fork Coalition (CFC) are partnering up to address this habitat degradation and improve conditions for these native trout populations.

The Dry Cottonwood Allotment hosts about 500 cow-calf pairs from June 15 to October 1st, which is prime spawning and rearing time for westslope cutthroat, a Species of Concern for the Forest Service. During this time, cattle concentrate along stream banks as weather gets hotter, and water gets scarce. This concentration of livestock impact tramples stream banks and cutthroat trout redds, reduces woody vegetation cover and shade, and impairs water quality. The Perkins Gulch, North Fork Dry Cottonwood, and Orofino Gulch westslope cutthroat populations are all within this allotment. The South Cottonwood Allotment hosts about 100 cow-calf pairs, generating the same problems, primarily due to concentration of livestock along the stream banks, and lack of alternative off-stream stock water sources.

To reduce livestock impact on these aquatic resources, this project will develop better off-stream water sources, reduce livestock access to the stream banks, encourage regeneration of more vigorous shrub growth along the channel, and protect water quality. The East Deer Lodge Landscape Project ROD specifically requires a number of restoration actions in these four drainages: construct four new off-stream stock water springboxes, pipelines and tanks, repair all existing tanks, and do riparian tree-felling (using beetle-killed lodgepole) to “jackstraw” logs along the stream banks. Jack-strawing logs across the creek will impede livestock access to the stream banks (dead lodgepole is abundant in this environment). In 2016 the allottees repaired all existing stock tanks.

For 2017 and 2018 the BVDL Forest and Clark Fork Coalition plan to implement the following as part of this Project:

- *One-half mile of riparian tree felling along the South Fork of Perkins Gulch.
- *Installation of one new off-stream stock water tank in South Fork of Perkins.
- *One mile of riparian tree felling along NF Dry Cottonwood Creek.
- *Installation of one new off-stream stock water tank in NF Dry Cottonwood (2 tanks were rehabilitated here in 2016).
- *Installation of one new off-stream stock water tank in Orofino Gulch.
- *Installation of one new off-stream stock water tank in South Fork of Cottonwood.

Stock water developments will be a combination of spring box (4” perf pipe with gravel bed and plastic cutoff), short buried pipeline (50 to 300 feet) and fiberglass stock tank with float control. All water development sites have been field-inspected by USFS and CFC. The US Forest Service can provide the stock water tanks, and will require the allottees to fence all the newly developed water sources. The Clark Fork Coalition will provide \$7500 for a 12-person tree-felling team from Montana Conservation Corps, and supervise all elements of the project, including stock water system installations. The partners are asking MFWP to support a portion of each stock water system (4 in all) and match the CF

Coalition's support for riparian tree-felling.

The Clark Fork Coalition and USFS are also working on resolving fish passage issues (primarily AOP culverts), on North Fork Dry Cottonwood, Perkins, and Cottonwood Creek, and on road sediment issues in Dry Cottonwood Creek, as part of more comprehensive watershed restoration activities in the East Deer Lodge valley.

D. Length of stream or size of lake that will be treated: Three miles of stream (total)

E. Project Budget:

Grant Request (Dollars): \$ 25,002

Contribution by Applicant (Dollars): \$ 11,900 In-kind \$
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ 5,800 In-kind \$
(attach verification - See page 2 budget template)

Total Project Cost: \$ 42,702

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Westslope cutthroat trout are the primary species that will benefit. Perkins, NF Dry Cottonwood and Orofino only have westslope cutthroat trout (genetically pure to 95% genetically pure). South Fork Cottonwood has primarily westslope cutthroat trout, which is the only fish species which showed up in the 2006 MFWP sampling. However other forks of Cottonwood Creek also have brook trout.

B. How will the project protect or enhance wild fish habitat?:

The project is designed to protect spawning and rearing habitat for four (4) westslope cutthroat trout populations by limiting livestock impact on the stream beds and stream banks of these four small stream systems.

C. Will the project improve fish populations and/or fishing? To what extent?:

We expect to see fish populations improve within all four of these stream systems as habitat and cover improve. The Perkins and Orofino populations are small and geographically isolated from other waters. The South Fork Cottonwood and NF Dry Cottonwood populations are connected to larger cutthroat populations, including some evidence of out-migration to the Clark Fork River, providing potential recruitment of fluvial fish for that river fishery.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The public fishes in Cottonwood Creek and in Dry Cottonwood. So increasing wild native trout populations there could provide more fishing opportunities in the streams, and in the Clark Fork river. The other two systems, Perkins and Orofino, are too small and remote to see significant fishing pressure, and are disconnected from the mainstem.

E. If the project requires maintenance, what is your time commitment to this project?:

Maintenance for the stock water system is responsibility of the National Forest allottees. The USFS range specialist requires this maintenance. The riparian tree felling will not require maintenance.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The primary cause of habitat degradation in these drainages is livestock impact during the summer and early fall, both physical impact on stream banks, trampling of redds, and over-browsing of riparian woody plants (aspen, willow, dogwood). These are small streams (2 to 5 foot wetted width), with decomposed granitic soils, and very susceptible to heavy livestock impact. The US Forest Service has officially recognized one allotment as not meeting riparian standards. The Project will reduce access of cattle to the streambanks, and provide an alternate water source for the livestock.

G. What public benefits will be realized from this project?:

The public will benefit from: a) better fish habitat and trout numbers on public land; b) better wildlife habitat (riparian shrub communities benefit grouse, moose, neotropical migratory birds), and c) better water quality.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

All the projects are on public land, and no water rights are affected.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

There is some recreational use of this area already, especially during hunting season. But there is no commercial use.

J. Is this project associated with the reclamation of past mining activity?:

No.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:

Date:

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To:

**Montana Fish, Wildlife & Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701**

Incomplete or late applications will be returned to applicant.

Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

East Deer Lodge stock water and habitat improvement
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

| WORK ITEMS (ITEMIZE BY CATEGORY) | NUMBER OF UNITS | UNIT DESCRIPTION * | COST/UNIT | TOTAL COST | CONTRIBUTIONS | | | |
|--|--------------------|--------------------------|------------|--------------|-----------------------------|-----------------------|--------------|--------------|
| | | | | | FUTURE FISHERIES REQUEST | IN-KIND SERVICES** | IN-KIND CASH | TOTAL |
| Personnel | | | | | | | | |
| Survey | | day | \$800.00 | \$ - | | 800.00 | 800.00 | \$ 1,600.00 |
| Design | | day | | \$ - | | | | \$ - |
| Engineering | | day | \$960.00 | \$ - | | | | \$ - |
| Permitting | 1 | day | \$400.00 | \$ 400.00 | | | 400.00 | \$ 400.00 |
| Oversight | 8 | day | \$400.00 | \$ 3,200.00 | | | 3,200.00 | \$ 3,200.00 |
| Fencing labor | 4 | days | \$500.00 | \$ 2,000.00 | | 2,000.00 | | |
| Felling labor | 3 | crew week | \$5,000.00 | \$ 15,000.00 | 7,500.00 | | 7,500.00 | \$ 15,000.00 |
| | | | Sub-Total | \$ 20,600.00 | \$ 7,500.00 | \$ 2,800.00 | \$ 11,900.00 | \$ 20,200.00 |
| Travel | | | | | | | | |
| Mileage | 600 | miles | \$0.55 | \$ 327.00 | 327.00 | | | \$ 327.00 |
| Per diem | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ 327.00 | \$ 327.00 | \$ - | \$ - | \$ 327.00 |
| Construction Materials*** | | | | | | | | |
| Fiberglass tank 500 gal | 4 | units | \$750.00 | \$ 3,000.00 | | 3,000.00 | | \$ 3,000.00 |
| 1.25" HDPE pipe | 900 | feet | \$0.95 | \$ 855.00 | 855.00 | | | \$ 855.00 |
| Perf pipe and spring boxes | 4 | units | \$200.00 | \$ 800.00 | 800.00 | | | \$ 800.00 |
| gravel for intakes | 16 | yds | \$25.00 | \$ 400.00 | 400.00 | | | \$ 400.00 |
| promising fixtures | 4 | set | \$100.00 | \$ 400.00 | 400.00 | | | \$ 400.00 |
| fence materials | 2000 | feet | \$0.50 | \$ 1,000.00 | 1,000.00 | | | \$ 1,000.00 |
| road mix (tank pads) | 16 | yds | \$20.00 | \$ 320.00 | 320.00 | | | \$ 320.00 |
| | | | Sub-Total | \$ 6,775.00 | \$ 3,775.00 | \$ 3,000.00 | \$ - | \$ 6,775.00 |
| Equipment | | | | | | | | |
| Trak hoe | 6 | days | \$1,100.00 | \$ 6,600.00 | 6,600.00 | | | \$ 6,600.00 |
| Dump Truck | 6 | days | \$800.00 | \$ 4,800.00 | 4,800.00 | | | \$ 4,800.00 |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ 11,400.00 | \$ 11,400.00 | \$ - | \$ - | \$ 11,400.00 |
| Mobilization | | | | | | | | |

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

| | | | | | | | | |
|----------------------|--|--|------------|--------------|--------------|-------------|--------------|--------------|
| equipment 4 sites | | | \$2,000.00 | \$ - | 2,000.00 | | | \$ 2,000.00 |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ - | \$ 2,000.00 | \$ - | \$ - | \$ 2,000.00 |
| TOTALS | | | | \$ 39,102.00 | \$ 25,002.00 | \$ 5,800.00 | \$ 11,900.00 | \$ 40,702.00 |

*Units = feet, hours, inches, lump sum, etc.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

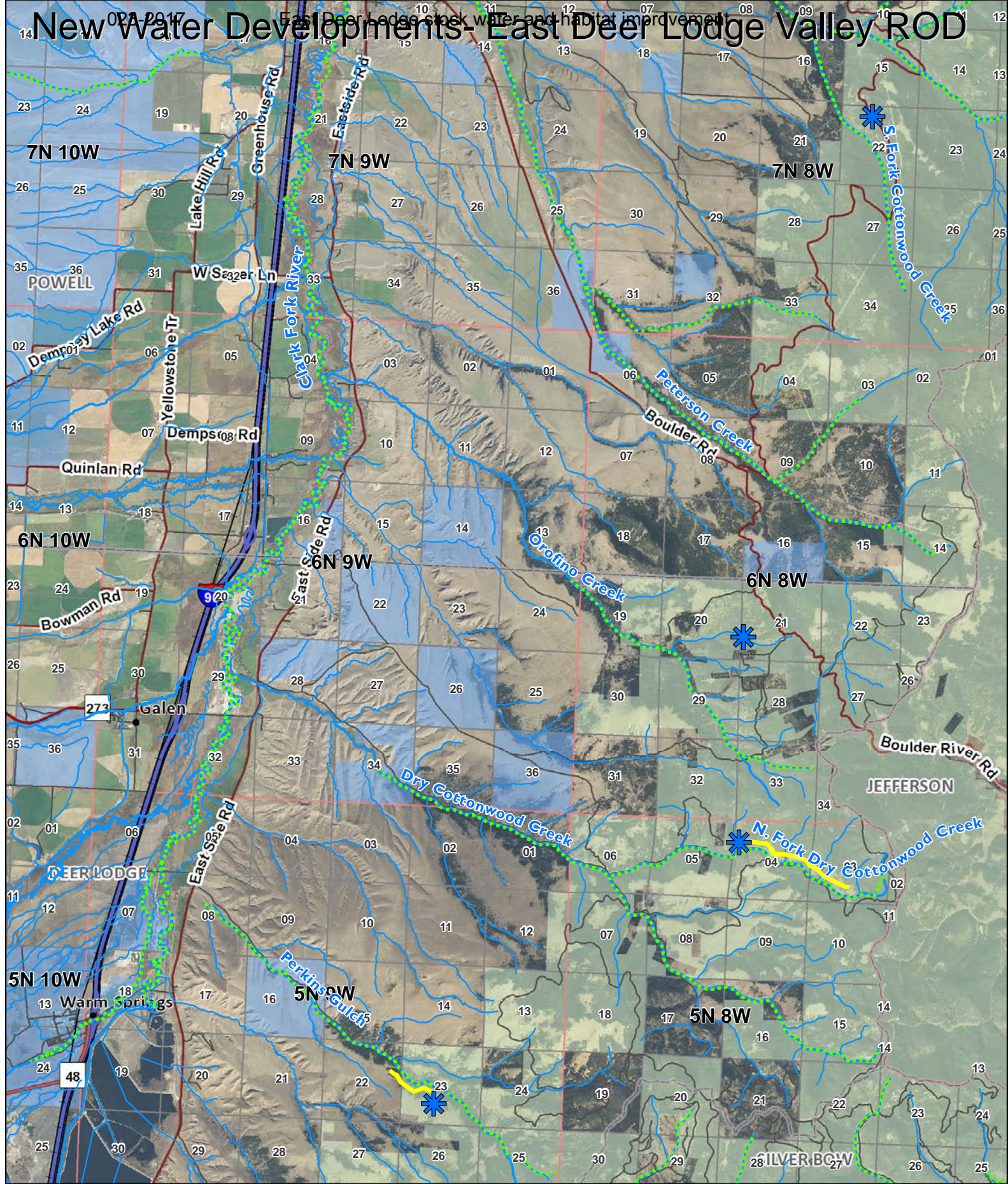
***The Future Fisheries Review Panel recommends a maximum fencing cost of \$1.50 per foot

MATCHING CONTRIBUTIONS (do not include requested funds)

| CONTRIBUTOR | IN-KIND SERVICE | IN-KIND CASH | TOTAL | Verified? (Y/N) |
|---------------------------------------|-----------------|--------------|--------------|-----------------|
| US Forest Service (BVDL NF) | \$ 5,800.00 | \$ - | \$ 5,800.00 | yes |
| Clark Fork Coalition (private grants) | \$ - | \$ 11,900.00 | \$ 11,900.00 | yes |
| | \$ - | | \$ - | yes |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | |
| TOTALS | \$ 5,800.00 | \$ 11,900.00 | \$ 17,700.00 | |



Fall 2014 Photo of North Fork Dry Cottonwood on USFS grazing allotment. Note hoof shear, over-widened channel and shallow water depth, physical impact to floodplain, loss of dense riparian brush. This type of reach probably has few if any remaining trout due to lack of habitat. REACH NF-F,



New Tanks

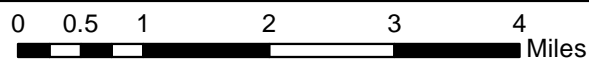


Tree Felling Project



Westslope Cutthroat Trout Present

Federal Land
State Land



Data Sources: MT FWP (fish residency)
MT State Library: GIS Clearinghouse

